

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Kindly cancel claims 1 - 4 without prejudice, in favor of new claims 5 - 11.

Claims 1 - 4. (Cancelled)

5. (NEW) A process for removing AlCl₃ from a compound mixture comprising organochlorosilanes and having an AlCl₃ content of > 200 ppm based on the weight of organochlorosilanes, comprising diluting the compound mixture with diluent comprising organochlorosilanes or mixtures of chloromethane and organochlorosilanes to form a product stream with < 15 weight percent solids at a simultaneous concentration of < 25 weight percent of components having a boiling point > 71°C at 1013 hPa, and separating this product stream in an evaporator unit at a temperature < 165°C into volatile compounds and AlCl₃-containing solid.

6. (NEW) The process of claim 5, wherein the compound mixture is derived from the direct synthesis of alkylchlorosilanes, or from the AlCl₃-catalysed high boiler cleavage of by-products of the direct synthesis.

7. (NEW) The process of claim 5, wherein the organochlorosilanes are alkylchlorosilanes of the formula R_aH_bSiCl_{4-a-b} in which a is 1, 2, 3 or 4, b is 0, 1 or 2, and R is a methyl, ethyl, butyl or propyl radical.

8. (NEW) The process of claim 6, wherein the organochlorosilanes are alkylchlorosilanes of the formula R_aH_bSiCl_{4-a-b} in which a is 1, 2, 3 or 4, b is 0, 1 or 2, and R is a methyl, ethyl, butyl or propyl radical.

9. (NEW) The process of claim 5, wherein the evaporator unit used is a spray evaporator, thin-layer evaporator, or thin-film evaporator.

10. (NEW) The process of claim 6, wherein the evaporator unit used is a spray evaporator, thin-layer evaporator, or thin-film evaporator.

11. (NEW) The process of claim 8, wherein the evaporator unit used is a spray evaporator, thin-layer evaporator, or thin-film evaporator.